ABSTRACT

The present invention provides methods and apparatus for upgrading firmware in an embedded system, without impacting the system. More specifically, the present invention enables an embedded system to be upgraded without any system downtime, by providing two application areas in non-volatile programmable read only memory. A processor can boot up and run from either application area. A fixed vector table is provided, which, in cooperation with a software vector table, enables the processor to maintain proper interrupt vector addresses while being able to run from either application area. Upgraded firmware can be loaded into one application area while the system is running from the other application area. Resetting the processor allows the system to run the upgraded version of firmware.